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Titles of Most Frequently Occurring Classifications of Patents Returne d

From A Search of 09980220 on October 15, 2004

```
455/186.1
                  (11 OR, 23 XR)
         Class
                 455 : TELECOMMUNICATIONS
         455/130
                       RECEIVER OR ANALOG MODULATED SIGNAL FREQUENCY
                              CONVERTER
         455/150.1
                       .Signal selection based on frequency (e.g.,
                             tuning)
         455/179.1
                       .. Channel or station selection
         455/185.1
                       ... With channel information storage
         455/186.1
                       ....With memory control or programming
2.7
   455/45
                  (7 OR, 20 XR)
         Class
                 455 : TELECOMMUNICATIONS
         455/39
                       TRANSMITTER AND RECEIVER AT SEPARATE STATIONS
         455/42
                       .Frequency or phase modulation
         455/45
                       .. Via subcarrier
14
    455/161.2
                  (3 OR, 11 XR)
         Class
                 455 : TELECOMMUNICATIONS
         455/130
                       RECEIVER OR ANALOG MODULATED SIGNAL FREQUENCY
                             CONVERTER
         455/150.1
                       .Signal selection based on frequency (e.g.,
                            tuning)
         455/161.1
                       .. Frequency scanning
         455/161.2
                       ...With processor control
11 455/161.3
                  (4 OR, 7 XR)
                 455 : TELECOMMUNICATIONS
         Class
                       RECEIVER OR ANALOG MODULATED SIGNAL FREQUENCY
         455/130
                             CONVERTER
         455/150.1
                       .Signal selection based on frequency (e.g.,
                            tuning)
         455/161.1
                       .. Frequency scanning
         455/161.3
                       ... Using signal strength or quality
7 340/825.72
                 (0 OR, 7 XR)
         Class
                 340 : COMMUNICATIONS: ELECTRICAL
         340/825
                       SELECTIVE
         340/825.71
                       .Frequency responsive actuation
         340/825.72
                      ..Wireless link
7 370/343
                 (2 OR, 5 XR)
        Class
                 370 : MULTIPLEX COMMUNICATIONS
```

	370/310 370/343	09980220_CLSTITLES COMMUNICATION OVER FREE SPACE .Combining or distributing information via frequency channels
7	455/130	OR, 5 XR) : TELECOMMUNICATIONS RECEIVER OR ANALOG MODULATED SIGNAL FREQUENCY CONVERTER .Measuring or testing of receiver
7	455/3.06 (6 Class 455 455/3.01	
6	340/825	<pre>: COMMUNICATIONS: ELECTRICAL SELECTIVE .Having indication or alarm (e.g., location indication)Code responsive (i.e., paging)</pre>
6		OR, 5 XR) : PULSE OR DIGITAL COMMUNICATIONS APPARATUS CONVERTIBLE TO ANALOG
6	375/219 (2 Class 375 375/219	: PULSE OR DIGITAL COMMUNICATIONS
6	375/285 (3 Class 375 375/259	OR, 3 XR) : PULSE OR DIGITAL COMMUNICATIONS SYSTEMS USING ALTERNATING OR PULSATING CURRENT
	375/285	.Antinoise or distortion
6		OR, 5 XR) : PULSE OR DIGITAL COMMUNICATIONS RECEIVERS

375 : PULSE OR DIGITAL COMMUNICATIONS

.Automatic frequency control

(0 OR, 6 XR)

RECEIVERS

6 375/344

Class 375/316

375/344

```
09980220 CLSTITLES
6 455/67.11
               (1 OR, 5 XR)
               455 : TELECOMMUNICATIONS
        Class
        455/39
                    TRANSMITTER AND RECEIVER AT SEPARATE STATIONS
        455/67.11 . Having measuring, testing, or monitoring of
                        system or part
  340/825.49
               (0 \text{ OR}, 5 \text{ XR})
        Class 340: COMMUNICATIONS: ELECTRICAL
        340/825
                     SELECTIVE
        340/825.36
                    .Having indication or alarm (e.g., location
                         indication)
                    ..Location indication
        340/825.49
  348/473
               (1 \text{ OR}, 4 \text{ XR})
        Class 348: TELEVISION
        348/469
                    FORMAT
        348/473
                    .Including additional information
  348/607
                (1 \text{ OR}, 4 \text{ XR})
        Class 348: TELEVISION
        348/571
                     IMAGE SIGNAL PROCESSING CIRCUITRY SPECIFIC TO
                         TELEVISION
        348/607
                     .Noise or undesired signal reduction
5 348/734
               (3 OR, 2 XR)
        Class
               348 : TELEVISION
        348/725
                 RECEIVER CIRCUITRY
        348/734
                    .Remote control
5 375/150
               (1 OR, 4 XR)
        Class 375: PULSE OR DIGITAL COMMUNICATIONS
        375/130
                    SPREAD SPECTRUM
        375/140
                    .Direct sequence
        375/147
                    ..Receiver
        375/150
                    ...Correlation-type receiver
5 375/222
               (5 OR, 0 XR)
       Class 375: PULSE OR DIGITAL COMMUNICATIONS
       375/219
                     TRANSCEIVERS
       375/222
                    .Modems (data sets)
5 375/296
                (1 OR, 4 XR)
       Class 375: PULSE OR DIGITAL COMMUNICATIONS
       375/295
                     TRANSMITTERS
        375/296
                     .Antinoise or distortion (includes
```

predistortion)

E	455/154 1 /0	09980220_CLSTITLES
5	455/154.1 (0	: TELECOMMUNICATIONS
	455/130	RECEIVER OR ANALOG MODULATED SIGNAL FREQUENCY CONVERTER
	455/150.1	.Signal selection based on frequency (e.g., tuning)
	455/154.1	-
5	455/158.4 (0	OR, 5 XR)
	Class 455	: TELECOMMUNICATIONS
	455/130	RECEIVER OR ANALOG MODULATED SIGNAL FREQUENCY CONVERTER
	455/150.1	<pre>.Signal selection based on frequency (e.g.,</pre>
	455/154.1	With indication of frequency, channel, or selector condition (e.g., tuning aid)
	455/158.1	
	455/158.4	With multiple display functions
5	455/158.5 (2	OR, 3 XR)
		: TELECOMMUNICATIONS
	455/130	RECEIVER OR ANALOG MODULATED SIGNAL FREQUENCY CONVERTER
	455/150.1	.Signal selection based on frequency (e.g., tuning)
	455/154.1	
	455/158.1	Channel index indication
	455/158.5	Non-numeric display (e.g., call letters)
5	455/228 (1	OR, 4 XR)
	Class 455	
	455/130	RECEIVER OR ANALOG MODULATED SIGNAL FREQUENCY CONVERTER
	455/227	Responsive to an input signal of particular predetermined frequency
	455/228	Responsive to specified modulation (e.g., call alarm, Conelrad)
5	455/70 (0	OR, 5 XR)
Ü	Class 455	
	455/39	TRANSMITTER AND RECEIVER AT SEPARATE STATIONS
	455/68	.With control signal
	455/70	Receiver control signal originates at messag

transmitter

е

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```
455/73
               (0 \text{ OR}, 5 \text{ XR})
        Class 455: TELECOMMUNICATIONS
        455/73
                     TRANSMITTER AND RECEIVER AT SAME STATION (E.G.
                         TRANSCEIVER)
  340/7.27
                (2 OR, 2 XR)
        Class
                340 : COMMUNICATIONS: ELECTRICAL
        340/825
                      SELECTIVE
        340/825.36
                      .Having indication or alarm (e.g., location
                             indication)
                      ...Code responsive (i.e., paging)
        340/7.2
        340/7.24
                      ... Transmitting configuration
        340/7.25
                      ....Multiple transmitters
        340/7.27
                     ....Zoned
                (0 OR, 4 XR)
  340/7.31
               340 : COMMUNICATIONS: ELECTRICAL
        Class
        340/825
                      SELECTIVE
        340/825.36
                     .Having indication or alarm (e.g., location
                            indication)
                      ..Code responsive (i.e., paging)
        340/7.2
                      ... Paging terminal (i.e., element prior to the
        340/7.28
                         transmitter)
        340/7.31
                      .... Message input
  340/825.02
               (3 OR, 1 XR)
        Class
               340 : COMMUNICATIONS: ELECTRICAL
        340/825
                     SELECTIVE
        340/825.02
                    .Tree or cascade
  348/21
                 (1 OR, 3 XR)
       Class
               348 : TELEVISION
        348/21
                     PLURAL TRANSMITTER SYSTEM CONSIDERATIONS (E.G.
                         INTERFERENCE REDUCTION)
  348/461
               (0 OR, 4 XR)
               348 : TELEVISION
        Class
        348/461
                     NONPICTORIAL DATA PACKET IN TELEVISION FORMAT
  348/725
                (0 OR, 4 XR)
               348 : TELEVISION
        Class
        348/725
                     RECEIVER CIRCUITRY
4 370/204
              (2 OR, 2 XR)
```

09980220 CLSTITLES 370 : MULTIPLEX COMMUNICATIONS Class GENERALIZED ORTHOGONAL OR SPECIAL MATHEMATICAL 370/203 TECHNIOUES 370/204 .Plural diverse modulation techniques 370/312 (3 OR, 1 XR)370 : MULTIPLEX COMMUNICATIONS Class COMMUNICATION OVER FREE SPACE 370/310 370/312 .Message addressed to multiple destinations 370/487 (1 OR, 3 XR)370 : MULTIPLEX COMMUNICATIONS Class 370/473 .. Transmission of a single message having multiple packets 370/480 .Combining or distributing information via frequency channels 370/485 .. Subscriber carrier 370/486 ... Program distribution 370/487Combined communication of diverse information types 370/522 (1 OR, 3 XR) Class 370 : MULTIPLEX COMMUNICATIONS 370/473 ..Transmission of a single message having multiple packets 370/498 .Combining or distributing information via tim channels 370/522 ...Signaling (ancillary to main information) 375/286 (1 OR, 3 XR)375 : PULSE OR DIGITAL COMMUNICATIONS Class 375/286 MULTILEVEL 4 375/346 (1 OR, 3 XR) Class 375 : PULSE OR DIGITAL COMMUNICATIONS 375/316 RECEIVERS 375/346 .Interference or noise reduction 380/34 (2 OR, 2 XR) Class 380 : CRYPTOGRAPHY

380/255 COMMUNICATION SYSTEM USING CRYPTOGRAPHY

380/270 .Wireless communication

380/33 .. Using plural paths or channels 380/34 ...Plural carrier frequencies

398/76 (3 OR, 1 XR)

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Class 398: OPTICAL COMMUNICATIONS

	398/43 398/76	09980220_CLSTITLES MULTIPLEX .Subcarrier multiplexing
4	455/91	: TELECOMMUNICATIONS
4	455/7	: TELECOMMUNICATIONS CARRIER WAVE REPEATER OR RELAY SYSTEM (I.E., RETRANSMISSION OF SAME INFORMATION) .Portable or mobile repeater
4	- 00, 20 2	: TELECOMMUNICATIONS
4	455/137 (1 Class 455 455/130 455 455/132 455/137	: TELECOMMUNICATIONS RECEIVER OR ANALOG MODULATED SIGNAL FREQUENCY CONVERTER
4	455/260 (2 Class 455 455/130 455/230 455/255 455/257 455/258 455/259 455/260	: TELECOMMUNICATIONS
4		OR, 4 XR) : TELECOMMUNICATIONS RECEIVER OR ANALOG MODULATED SIGNAL FREQUENCY CONVERTER .Combined with diverse art device

455/345	With	vehicle

	455/.345	with venicle
4		OR, 4 XR) : TELECOMMUNICATIONS TRANSMITTER AND RECEIVER AT SEPARATE STATIONS
	455/500 455/501 455/502 455/503	 .Plural transmitters or receivers (i.e., more than two stations) .Noise, distortion, or singing reduction Synchronized stations Simulcast system
4	455/67.13 (0 Class 455 455/39 455/67.11 455/67.13	OR, 4 XR) : TELECOMMUNICATIONS TRANSMITTER AND RECEIVER AT SEPARATE STATIONS .Having measuring, testing, or monitoring of system or partNoise, distortion, or unwanted signal detection (e.g., qualify control, etc.)

3	128/903	(0	OR, 3 XR)
	Class	128	: SURGERY
	128/903		RADIO TELEMETRY

3	329/300	(2	OR,	1 XR)						
	Class	329	:	DEMODULA'	TORS					
	329/300		F	REQUENCY	SHIFT	KEYING	OR	MUMINIM	SHIFT	KEYING
				DEMODU:	LATOR					

3	340/531	(0	OR, 3 XR)	
	Class	340	: COMMUNICATIONS: ELECTRICAL	
	340/500		CONDITION RESPONSIVE INDICATING ST	YSTEM
	340/531		.With particular coupling link	

3	340/7.43 (0 OI	R, 3 XR)
		COMMUNICATIONS: ELECTRICAL
	340/825	SELECTIVE
	340/825.36	.Having indication or alarm (e.g., location indication)
	340/7.2	Code responsive (i.e., paging)
	340/7.43	Particular message and address format (e.g.

POCSAG, FLEX, etc.)

3 340/825.69 (0 OR, 3 XR) Class 340: COMMUNICATIONS: ELECTRICAL 340/825 SELECTIVE

	340/825.57 340/825.62 340/825.69	Serial
3	340/988 (0 Class 340 340/988	: COMMUNICATIONS: ELECTRICAL
3		: COMMUNICATIONS: DIRECTIVE RADIO WAVE SYSTEMS AND DEVICES
	342/118 342/128	DETERMINING DISTANCE .With frequency modulation
3	342/457 (0 Class 342	OR, 3 XR) : COMMUNICATIONS: DIRECTIVE RADIO WAVE SYSTEMS AND DEVICES
		DIRECTIVE .Position indicating (e.g., triangulation)
3	348/460 (0 Class 348 348/460	: TELEVISION
3	348/469	: TELEVISION
3		OR, 2 XR) : TELEVISION BASIC RECEIVER WITH ADDITIONAL FUNCTION .For display of additional informationReceiver indicator (e.g., on screen display)
3	•	OR, 2 XR) : MULTIPLEX COMMUNICATIONS COMMUNICATION OVER FREE SPACE .Combining or distributing information via tim
		channels

..Synchronization

е

370/350

3	370/475 Class 370/473 370/475	370	: MULTIPLEX COMMUNICATIONS
3	370/483 Class 370/473 370/480 370/483	370	: MULTIPLEX COMMUNICATIONS
3	•	372	: COHERENT LIGHT GENERATORS PARTICULAR RESONANT CAVITY
3	375/130 Class 375/130	375	: PULSE OR DIGITAL COMMUNICATIONS
3	375/142 Class 375/130 375/140 375/141 375/142	375	: PULSE OR DIGITAL COMMUNICATIONS SPREAD SPECTRUM .Direct sequence
3	375/259 Class 375/259	375	OR, 1 XR) : PULSE OR DIGITAL COMMUNICATIONS SYSTEMS USING ALTERNATING OR PULSATING CURRENT
3	375/260 Class 375/259	375	OR, 3 XR) : PULSE OR DIGITAL COMMUNICATIONS SYSTEMS USING ALTERNATING OR PULSATING CURRENT .Plural channels for transmission of a single
	- · - , _ 0		pulse train
3	375/300	0)	OR, 3 XR)

3 375/324 (2 OR, 1 XR)

Class

375/295 375/300

.Amplitude modulation

375 : PULSE OR DIGITAL COMMUNICATIONS TRANSMITTERS

```
09980220 CLSTITLES
        Class
                375 : PULSE OR DIGITAL COMMUNICATIONS
        375/316
                    RECEIVERS
                    .Angle modulation
        375/322
        375/324
                     ..Particular demodulator
3 375/350
                (0 \text{ OR}, 3 \text{ XR})
                375 : PULSE OR DIGITAL COMMUNICATIONS
        Class
        375/316
                     RECEIVERS
        375/346
                      .Interference or noise reduction
                     ..By filtering (e.g., digital)
        375/350
3 385/14
                (0 OR, 3 XR)
        Class
               385 : OPTICAL WAVEGUIDES
        385/14
                      INTEGRATED OPTICAL CIRCUIT
3
  386/83
                (3 OR, 0 XR)
                386 : TELEVISION SIGNAL PROCESSING FOR DYNAMIC
        Class
                        RECORDING OR REPRODUCING
                      PROCESSING OF TELEVISION SIGNAL FOR DYNAMIC
        386/46
                          RECORDING OR REPRODUCING
                      .Including programmable apparatus
        386/83
  398/106
                (1 \text{ OR}, 2 \text{ XR})
        Class
                398 : OPTICAL COMMUNICATIONS
        398/106
                     REMOTE CONTROL
3
  398/186
                (0 OR, 3 XR)
               398 : OPTICAL COMMUNICATIONS
        Class
        398/182
                     TRANSMITTER
                    .Having particular modulation
        398/183
        398/186
                    .. Intensity modulation
  398/187
               (0 OR, 3 XR)
        Class 398: OPTICAL COMMUNICATIONS
        398/182
                     TRANSMITTER
        398/183
                    .Having particular modulation
                     .. Frequency modulation
        398/187
  398/201
                (1 \text{ OR}, 2 \text{ XR})
               398 : OPTICAL COMMUNICATIONS
        Class
        398/182
                     TRANSMITTER
        398/201
                     .Including specific optical elements
  455/103
                (0 OR, 3 XR)
               455 : TELECOMMUNICATIONS
       Class
        455/91
                     TRANSMITTER
```

.Plural separate transmitters or channels

455/103

09980220 CLSTITLES 455/151.1 (0 OR, 3 XR) 455 : TELECOMMUNICATIONS Class 455/130 RECEIVER OR ANALOG MODULATED SIGNAL FREQUENCY CONVERTER 455/150.1 .Signal selection based on frequency (e.g., tuning) 455/151.1 .. Remote control of channel or station selection 455/166.2 (1 OR, 2 XR)Class 455 : TELECOMMUNICATIONS 455/130 RECEIVER OR ANALOG MODULATED SIGNAL FREQUENCY CONVERTER .Signal selection based on frequency (e.g., 455/150.1 tuning) 455/161.1 .. Frequency scanning 455/166.1 ...With channel skipping selection 455/166.2With priority channel selection 455/182.2 (0 OR, 3 XR)Class 455 : TELECOMMUNICATIONS RECEIVER OR ANALOG MODULATED SIGNAL FREQUENCY 455/130 CONVERTER .Signal selection based on frequency (e.g., 455/150.1 tuning) 455/179.1 .. Channel or station selection 455/182.1 ...With frequency control 455/182.2Automatic (AFC) 455/184.1 (1 OR, 2 XR) Class 455 : TELECOMMUNICATIONS 455/130 RECEIVER OR ANALOG MODULATED SIGNAL FREQUENCY CONVERTER 455/150.1 .Signal selection based on frequency (e.g., tuning) 455/179.1 .. Channel or station selection 455/184.1 ...With comparing desired and existing tuning conditions 455/186.2 (0 OR, 3 XR)Class 455 : TELECOMMUNICATIONS 455/130 RECEIVER OR ANALOG MODULATED SIGNAL FREQUENCY CONVERTER 455/150.1 .Signal selection based on frequency (e.g., tuning) 455/179.1 .. Channel or station selection

...With channel information storage

....With memory control or programming

455/185.1

455/186.1

09980220 CLSTITLES 455/186.2Having a keyboard (0 OR, 3 XR) 455/192.2 455 : TELECOMMUNICATIONS Class 455/130 RECEIVER OR ANALOG MODULATED SIGNAL FREQUENCY CONVERTER 455/150.1 .Signal selection based on frequency (e.g., tuning) 455/192.1 ..With frequency control 455/192.2 ...Automatic (AFC) 3 455/205 (2 OR, 1 XR) Class 455 **:** TELECOMMUNICATIONS 455/130 RECEIVER OR ANALOG MODULATED SIGNAL FREQUENCY CONVERTER 455/205 .Frequency or phase modulation 455/212 (1 OR, 2 XR) 455 : TELECOMMUNICATIONS Class 455/130 RECEIVER OR ANALOG MODULATED SIGNAL FREQUENCY CONVERTER 455/205 .Frequency or phase modulation 455/212 ..With squelch or other audio output silencing 3 455/273 (0 OR, 3 XR) 455 : TELECOMMUNICATIONS Class 455/130 RECEIVER OR ANALOG MODULATED SIGNAL FREQUENCY CONVERTER 455/269 .With wave collector (e.g., antenna) 455/272 ..Plural separate collectors 455/273 ...With particular output combining 455/502 (0 OR, 3 XR) 455 : TELECOMMUNICATIONS Class 455/39 TRANSMITTER AND RECEIVER AT SEPARATE STATIONS 455/500 .Plural transmitters or receivers (i.e., more than two stations) 455/501 .. Noise, distortion, or singing reduction 455/502 ... Synchronized stations 455/517 (1 OR, 2 XR) Class 455 : TELECOMMUNICATIONS

Page 13

than two stations)

TRANSMITTER AND RECEIVER AT SEPARATE STATIONS

.Plural transmitters or receivers (i.e., more

455/39

455/500

	455/507 455/517	09980220_CLSTITLESCentral station (e.g., master, etc.)To or from mobile station
3		OR, 2 XR) : TELECOMMUNICATIONS TRANSMITTER AND RECEIVER AT SEPARATE STATIONS
	455/63.1	.Distortion, noise, or other interference prevention, reduction, or compensation
3		OR, 3 XR) : TELECOMMUNICATIONS TRANSMITTER AND RECEIVER AT SEPARATE STATIONS
	455/68 455/70	.With control signalReceiver control signal originates at messag
•	455/72	<pre>transmitterFor compression and expansion of message signal (i.e., companding)</pre>
3		OR, 3 XR) : TELECOMMUNICATIONS TRANSMITTER .Convertible to different type (e.g., AM to FM)
3	600/509 (2 Class 600 600/300 600/481 600/508 600/509	OR, 1 XR) : SURGERY DIAGNOSTIC TESTING .CardiovascularHeartDetecting heartbeat electric signal
3	701/208 (0 Class 701	
	701/200 701/207 701/208	RELATIVE LOCATION NAVIGATION .Employing position determining equipmentFor use in a map data base system
3		OR, 3 XR) : DATA PROCESSING: VEHICLES, NAVIGATION, AND RELATIVE LOCATION
	701/200 701/207 701/213	NAVIGATION .Employing position determining equipment Using Global Positioning System (GPS)

е

)

```
3 701/215
                  (0 \text{ OR}, 3 \text{ XR})
          Class
                  701 : DATA PROCESSING: VEHICLES, NAVIGATION, AND
                          RELATIVE LOCATION
          701/200
                        NAVIGATION
          701/207
                        .Employing position determining equipment
          701/213
                        .. Using Global Positioning System (GPS)
                        ... Means to improve accuracy of position or
          701/214
                            location
                         .... Having multiple GPS antennas or receivers
          701/215
                            (e.g., differential GPS)
 3 725/41
                   (3 OR, 0 XR)
                  725 : INTERACTIVE VIDEO DISTRIBUTION SYSTEMS
          Class
          725/37
                        OPERATOR INTERFACE
          725/38
                        .To facilitate tuning or selection of video
                              signal
          725/39
                        .. Electronic program guide
          725/40
                        ... For displaying additional information
          725/41
                        ....Video still or clip
 2 235/380
                   (0 OR, 2 XR)
          Class
                  235 : REGISTERS
          235/375
                        SYSTEMS CONTROLLED BY DATA BEARING RECORDS
          235/380
                        .Credit or identification card systems
 2
    324/334
                   (2 OR, 0 XR)
          Class
                  324 : ELECTRICITY: MEASURING AND TESTING
          324/323
                        OF GEOPHYSICAL SURFACE OR SUBSURFACE IN SITU
          324/332
                        .With radiant energy or nonconductive-type
                            transmitter
          324/334
                        ..With separate pickup
    324/338
                  (0 \text{ OR}, 2 \text{ XR})
                  324 : ELECTRICITY: MEASURING AND TESTING
          Class
          324/323
                        OF GEOPHYSICAL SURFACE OR SUBSURFACE IN SITU
          324/332
                        .With radiant energy or nonconductive-type
                             transmitter
          324/334
                        ..With separate pickup
          324/338
                        ...Within a borehole
   332/100
                   (1 \text{ OR}, 1 \text{ XR})
         Class
                  332 : MODULATORS
          332/100
                        FREQUENCY SHIFT KEYING MODULATOR OR MINIMUM
                           SHIFT KEYING MODULATOR
. 2
   332/103
                  (0 OR, 2 XR)
         Class
                 332 : MODULATORS
```

AMPLITUDE MODULATOR

PHASE SHIFT KEYING MODULATOR OR QUADRATURE

340/310.02 (1 OR, 1 XR) 340 : COMMUNICATIONS: ELECTRICAL Class 340/286.01 SYSTEMS 340/310.01 .Signal over power line 340/310.02 .. Modulation technique 2 340/518 (0 OR, 2 XR) 340 : COMMUNICATIONS: ELECTRICAL Class CONDITION RESPONSIVE INDICATING SYSTEM 340/500 340/501 .With particular system function (e.g., temperature compensation, calibration) 340/517 .. Selection from a plurality of sensed conditions 340/518 ... Scanning 340/539.16 (2 OR, 0 XR) Class 340 : COMMUNICATIONS: ELECTRICAL 340/500 CONDITION RESPONSIVE INDICATING SYSTEM 340/531 .With particular coupling link 340/539.1 ..Radio 340/539.16 ...Including central station detail 340/7.21 (2 OR, 0 XR) Class 340 : COMMUNICATIONS: ELECTRICAL 340/825 SELECTIVE 340/825.36 .Having indication or alarm (e.g., location indication) 340/7.2 ..Code responsive (i.e., paging)

2 340/7.22 (1 OR, 1 XR)

340/7.21

332/103

Class 340: COMMUNICATIONS: ELECTRICAL

... Two-way paging

340/825 SELECTIVE

340/825.36 .Having indication or alarm (e.g., location indication)

340/7.2 ... Code responsive (i.e., paging)

340/7.21 ... Two-way paging

340/7.22Acknowledgment of message receipt

2 340/7.41 (2 OR, 0 XR)

Class 340: COMMUNICATIONS: ELECTRICAL

340/825 SELECTIVE

340/825.36 .Having indication or alarm (e.g., location

indication)

340/7.2 ... Code responsive (i.e., paging)

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09980220 CLSTITLES
        340/7.39
                      ... Programming the receiver
        340/7.41
                      ....Over the air
   340/7.42
                 (0 \text{ OR}, 2 \text{ XR})
        Class
                340 : COMMUNICATIONS: ELECTRICAL
        340/825
                      SELECTIVE
        340/825.36
                      .Having indication or alarm (e.g., location
                           indication)
        340/7.2
                      ..Code responsive (i.e., paging)
        340/7.42
                      ... Frequency scanning for address
2
  340/7.48
                 (0 OR, 2 XR)
                340 : COMMUNICATIONS: ELECTRICAL
        Class
        340/825
                      SELECTIVE
        340/825.36
                      .Having indication or alarm (e.g., location
                             indication)
        340/7.2
                      .. Code responsive (i.e., paging)
        340/7.45
                      ... Addressing format
        340/7.46
                      .... Group call
        340/7.48
                      ..... News information provider (e.g., sports,
                         weather, etc.)
   340/7.49
                 (0 OR, 2 XR)
        Class
                340 : COMMUNICATIONS: ELECTRICAL
        340/825
                      SELECTIVE
        340/825.36
                      .Having indication or alarm (e.g., location
                            indication)
        340/7.2
                      ..Code responsive (i.e., paging)
        340/7.45
                      ... Addressing format
        340/7.49
                      .... Tone code (i.e., frequency code)
  340/7.55
                 (1 OR, 1 XR)
                340 : COMMUNICATIONS: ELECTRICAL
        Class
        340/825
                      SELECTIVE
        340/825.36
                      .Having indication or alarm (e.g., location
                            indication)
        340/7.2
                      .. Code responsive (i.e., paging)
        340/7.51
                      ... Message presentation
        340/7.55
                      ....Display
2 340/825.22
                (0 OR, 2 XR)
        Class
                340 : COMMUNICATIONS: ELECTRICAL
        340/825
                      SELECTIVE
        340/825.22
                     .Program control
2 340/825.25
                (2 OR, 0 XR)
                340 : COMMUNICATIONS: ELECTRICAL
        Class
        340/825
                      SELECTIVE
```

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09980220 CLSTITLES
      340/825.25
                    .Audio system (e.g., by pulse signal)
             (0 OR, 2 XR)
 340/825.62
      Class 340: COMMUNICATIONS: ELECTRICAL
      340/825
                   SELECTIVE
                  .Pulse responsive actuation
      340/825.57
      340/825.62
                   ..Serial
340/825.73
             (0 OR, 2 XR)
      Class
              340 : COMMUNICATIONS: ELECTRICAL
                 SELECTIVE
      340/825
      340/825.71 .Frequency responsive actuation 340/825.73 ..Plural frequencies
340/870.11
             (2 OR, 0 XR)
      Class
              340 : COMMUNICATIONS: ELECTRICAL
      340/870.01
                   CONTINUOUSLY VARIABLE INDICATING (E.G.,
                        TELEMETERING)
      340/870.11 .Plural transmitters
340/870.17
             (2 OR, 0 XR)
      Class
              340 : COMMUNICATIONS: ELECTRICAL
      340/870.01 CONTINUOUSLY VARIABLE INDICATING (E.G.,
                        TELEMETERING)
      340/870.16 .Condition responsive 340/870.17 .Temperature
340/870.41
             (0 OR, 2 XR)
      Class 340: COMMUNICATIONS: ELECTRICAL
      340/870.01 CONTINUOUSLY VARIABLE INDICATING (E.G.,
                         TELEMETERING)
      340/870.4 .With particular receiver (e.g., ratiometer)
      340/870.41
                   ..Plural receivers
340/905
             (0 OR, 2 XR)
      Class 340 : COMMUNICATIONS: ELECTRICAL
      340/901
                   EXTERNAL CONDITION VEHICLE-MOUNTED INDICATOR O
                       ALARM
      340/905
                    .Highway information (e.g., weather, speed
                      limits, etc.)
340/989
               (0 OR, 2 XR)
             340 : COMMUNICATIONS: ELECTRICAL
      Class
                 VEHICLE POSITION INDICATION .At remote location
      340/988
```

2 340/990 (0 OR, 2 XR)

340/989

R

	Class 340/988 340/989 340/990		09980220_CLSTITLES : COMMUNICATIONS: ELECTRICAL VEHICLE POSITION INDICATION .At remote locationWith map display
2	341/173	341	: CODED DATA GENERATION OR CONVERSION
2	342/118 342/120	342	: COMMUNICATIONS: DIRECTIVE RADIO WAVE SYSTEMS AND DEVICES DETERMINING DISTANCE .Altimeter
2	342/122 342/25F Class	(0	<pre>FM type OR, 2 XR) : COMMUNICATIONS: DIRECTIVE RADIO WAVE SYSTEMS AND DEVICES</pre>
	342/25R 342/25A 342/25F		SYNTHETIC APERTURE RADAR .Mapping or imaging using synthetic aperture radarParticular SAR processing techniques (e.g.
spotl	ight mode,		squint mode, doppler beam-sharpening mode,
			bistatic SAR, inverse SAR)
2		342	: COMMUNICATIONS: DIRECTIVE RADIO WAVE SYSTEMS AND DEVICES
	342/25R		SYNTHETIC APERTURE RADAR
2	342/357.06 Class	(0 342	OR, 2 XR) : COMMUNICATIONS: DIRECTIVE RADIO WAVE SYSTEMS AND DEVICES
	342/350 342/352 342/357. 342/357.		DIRECTIVE .Including a satelliteWith position indicatingUsing Global Positioning Satellite (GPS or Glonass)
2	342/357.1 Class 342/350 342/352 342/357.	342	OR, 1 XR) : COMMUNICATIONS: DIRECTIVE RADIO WAVE SYSTEMS AND DEVICES DIRECTIVE .Including a satelliteWith position indicating

		09980220_CLSTITLES
	342/357.06	Glonass)
	342/357.1	Combined with telecommunication
2	342/42 (2 Class 342	OR, 0 XR) : COMMUNICATIONS: DIRECTIVE RADIO WAVE SYSTEMS AND DEVICES
	342/42	RADAR TRANSPONDER SYSTEM
2		OR, 1 XR) : TELEVISION NONPICTORIAL DATA PACKET IN TELEVISION FORMAT
	348/468	.Including teletext decoder or display
2		: TELEVISION BASIC RECEIVER WITH ADDITIONAL FUNCTION
	348/555	<pre>For receiving more than one format at will (e.g., NTSC/PAL)</pre>
2		: TELEVISION RECEIVER CIRCUITRY
iver		Deducate of in combination with radio rece
2,	360/72.1 (0 Class 360 360/69	: DYNAMIC MAGNETIC INFORMATION STORAGE OR RETRIEVAL
	360/71 360/72.1	AUTOMATIC CONTROL OF A RECORDER MECHANISM .Controlling the recordLocating specific areas
2	370/208 (0 Class 370 370/203 370/208	OR, 2 XR) : MULTIPLEX COMMUNICATIONS GENERALIZED ORTHOGONAL OR SPECIAL MATHEMATICAL TECHNIQUES .Particular set of orthogonal functions
2		OR, 2 XR) : MULTIPLEX COMMUNICATIONS SPECIAL SERVICES .Distribution of signal to multiple agent

09980220_CLSTITLES stations

2	370/276 370/277	370	OR, 2 XR) : MULTIPLEX COMMUNICATIONS DUPLEX .Communication over free spaceFrequency division
2		370	: MULTIPLEX COMMUNICATIONS COMMUNICATION OVER FREE SPACE
2 e	Class	370	: MULTIPLEX COMMUNICATIONS COMMUNICATION OVER FREE SPACE
C			word channels using multiple access techniq
ues	(e.g., CDMA)		
		370	: MULTIPLEX COMMUNICATIONS COMMUNICATION OVER FREE SPACE
е	370/349		channels Using messages having an address field as header
2		370	: MULTIPLEX COMMUNICATIONS CHANNEL ASSIGNMENT TECHNIQUES
2	370/480 Class 370/473		OR, 1 XR) : MULTIPLEX COMMUNICATIONSTransmission of a single message having multiple packets
	370/480		.Combining or distributing information via frequency channels
2	370/486 Class 370/473		OR, 1 XR) : MULTIPLEX COMMUNICATIONSTransmission of a single message having
	370/480		multiple packets .Combining or distributing information via

09980220 CLSTITLES frequency channels ... Subscriber carrier 370/485 ...Program distribution 370/486 2 370/491 (0 OR, 2 XR) 370 : MULTIPLEX COMMUNICATIONS Class ..Transmission of a single message having 370/473 multiple packets .Combining or distributing information via 370/480 frequency channels 370/491 ..Pilot 2 370/503 (0 OR, 2 XR) Class 370 : MULTIPLEX COMMUNICATIONS 370/473 ..Transmission of a single message having multiple packets .Combining or distributing information via tim 370/498 е channels 370/503 ... Synchronizing 2 370/509 (0 OR, 2 XR) Class 370 : MULTIPLEX COMMUNICATIONS 370/473 .. Transmission of a single message having multiple packets 370/498 .Combining or distributing information via tim е channels 370/503 ..Synchronizing 370/509 ... Using synchronization information contained in a frame 370/529 (1 OR, 1 XR) 370 : MULTIPLEX COMMUNICATIONS 370/473 ..Transmission of a single message having multiple packets 370/498 .Combining or distributing information via tim е channels 370/529 .. Information superimposed on other informatio n 372/28 2 (0 OR, 2 XR) 372 : COHERENT LIGHT GENERATORS Class 372/9 PARTICULAR BEAM CONTROL DEVICE 372/26 .Modulation

.. Frequency

372/28

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2 372/46 (0 OR, 2 XR)
Class 372 : COHERENT LIGHT GENERATORS
        372/39
                     PARTICULAR ACTIVE MEDIA
                    .Semiconductor
        372/43
                    ..Injection
        372/44
                     ...Particular current control structure
        372/46
  375/131
               (1 \text{ OR}, 1 \text{ XR})
               375 : PULSE OR DIGITAL COMMUNICATIONS
       Class
        375/130
                     SPREAD SPECTRUM
        375/131
                    .Hybrid form
  375/240
               (1 \text{ OR}, 1 \text{ XR})
       Class
               375 : PULSE OR DIGITAL COMMUNICATIONS
                     BANDWIDTH REDUCTION OR EXPANSION
        375/240
  375/257
               (0 OR, 2 XR)
        Class 375: PULSE OR DIGITAL COMMUNICATIONS
                     CABLE SYSTEMS AND COMPONENTS
        375/257
2 375/275
                (0 OR, 2 XR)
        Class
               375 : PULSE OR DIGITAL COMMUNICATIONS
        375/259
                     SYSTEMS USING ALTERNATING OR PULSATING CURRENT
        375/271
                    .Angle modulation
        375/272
                     .. Frequency shift keying
        375/275
                     ... More than two frequencies
2 375/295
               (1 OR, 1 XR)
       Class
               375 : PULSE OR DIGITAL COMMUNICATIONS
        375/295
                     TRANSMITTERS
  375/302
               (0 OR, 2 XR)
        Class
               375 : PULSE OR DIGITAL COMMUNICATIONS
        375/295
                     TRANSMITTERS
        375/302
                    .Angle modulation
  375/303
                (0 OR, 2 XR)
               375 : PULSE OR DIGITAL COMMUNICATIONS
        Class
        375/295
                     TRANSMITTERS
                    .Angle modulation
        375/302
        375/303
                    .. Frequency shift keying
2 375/308
               (1 OR, 1 XR)
       Class 375: PULSE OR DIGITAL COMMUNICATIONS
        375/295
                     TRANSMITTERS
        375/302
                   .Angle modulation
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	375/308		Phase shift keying
2		375	OR, 2 XR) : PULSE OR DIGITAL COMMUNICATIONS RECEIVERS .Angle modulationParticular demodulatorPhase locked loop
2	375/316 375/322	375	: PULSE OR DIGITAL COMMUNICATIONS RECEIVERS .Angle modulationPhase shift keying
2	Class 375/316	375	: PULSE OR DIGITAL COMMUNICATIONS RECEIVERS .Angle modulation
2		375	: PULSE OR DIGITAL COMMUNICATIONS RECEIVERS .Angle modulation
2	375/336 Class 375/316 375/322 375/334 375/336	375	: PULSE OR DIGITAL COMMUNICATIONS
2		375	: PULSE OR DIGITAL COMMUNICATIONS RECEIVERS
2	375/345 Class 375/316 375/345	375	OR, 2 XR) : PULSE OR DIGITAL COMMUNICATIONS RECEIVERS .Automatic gain control

2 375/347 (0 OR, 2 XR)

09980220 CLSTITLES 375 : PULSE OR DIGITAL COMMUNICATIONS Class 375/316 RECEIVERS .Interference or noise reduction 375/346 375/347 ..Diversity (frequency or time) 375/371 (0 OR, 2 XR) 375 : PULSE OR DIGITAL COMMUNICATIONS Class SYNCHRONIZERS 375/354 375/371 .Phase displacement, slip or jitter correction 2 375/373 (0 OR, 2 XR) 375 : PULSE OR DIGITAL COMMUNICATIONS Class 375/354 SYNCHRONIZERS 375/371 .Phase displacement, slip or jitter correction 375/373 .. Phase locking 379/93.28 (0 OR, 2 XR) 379 : TELEPHONIC COMMUNICATIONS Class 379/90.01 TELEPHONE LINE OR SYSTEM COMBINED WITH DIVERSE ELECTRICAL SYSTEM OR SIGNALLING (E.G., C OMPOSITE) 379/93.01 .Having transmission of a digital message signal over a telephone line 379/93.26 .. By voice frequency signal (e.g., tone code) 379/93.28 ... Modulated audio tone 380/223 (2 OR, 0 XR) Class 380 : CRYPTOGRAPHY 380/200 VIDEO CRYPTOGRAPHY 380/210 .Video electric signal modification (e.g., scrambling) 380/221 .. By modifying synchronizing signal 380/223 ... Key signal on separate carrier 380/269 (0 OR, 2 XR) Class 380 : CRYPTOGRAPHY 380/255 COMMUNICATION SYSTEM USING CRYPTOGRAPHY 380/269 .Having compression 381/2 (0 OR, 2 XR) Class 381 : ELECTRICAL AUDIO SIGNAL PROCESSING SYSTEMS

BINAURAL AND STEREOPHONIC

.Broadcast or multiplex stereo

AND DEVICES

381/1

381/2

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09980220 CLSTITLES
2 381/4
                (1 OR, 1 XR)
               381 : ELECTRICAL AUDIO SIGNAL PROCESSING SYSTEMS
       Class
                       AND DEVICES
                     BINAURAL AND STEREOPHONIC
        381/1
                     .Broadcast or multiplex stereo
        381/2
        381/3
                     ..FM final modulation
                      ... AM subcarrier
        381/4
  386/105
                 (2 OR, 0 XR)
               386 : TELEVISION SIGNAL PROCESSING FOR DYNAMIC
       Class
                       RECORDING OR REPRODUCING
                     PROCESSING OF TELEVISION SIGNAL FOR DYNAMIC
        386/46
                            RECORDING OR REPRODUCING
                      .Having another signal
        386/95
        386/96
                     .. Audio signal
                      ...Digital audio signal
        386/104
                     ....Disc
        386/105
  398/66
                (0 OR, 2 XR)
        Class 398: OPTICAL COMMUNICATIONS
        398/43
                     MULTIPLEX
        398/66
                      .Broadcast and distribution system
  398/90
                (1 OR, 1 XR)
        Class
               398 : OPTICAL COMMUNICATIONS
        398/43
                     MULTIPLEX
        398/79
                      .Wavelength division or frequency division
                          (e.g., Raman, Brillouin, etc.)
                      .. Electrically controlled single source
        398/90
2
  455/132
                (0 OR, 2 XR)
                455 : TELECOMMUNICATIONS
        Class
        455/130
                     RECEIVER OR ANALOG MODULATED SIGNAL FREQUENCY
                         CONVERTER
        455/132
                     .Plural receivers
2
                (0 OR, 2 XR)
  455/142
               455 : TELECOMMUNICATIONS
        Class
        455/130
                     RECEIVER OR ANALOG MODULATED SIGNAL FREQUENCY
                         CONVERTER
        455/142
                     .Convertible to different type (e.g., AM to FM
  455/154.2
                (1 OR, 1 XR)
                455 : TELECOMMUNICATIONS
        455/130
                     RECEIVER OR ANALOG MODULATED SIGNAL FREQUENCY
                           CONVERTER
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	455/150.1 455/154.1 455/154.2	<pre>09980220_CLSTITLES .Signal selection based on frequency (e.g.,</pre>
2	455/158.2 (0 Class 455 455/130 455/150.1 455/154.1 455/158.1 455/158.2	
2	455/166.1 (1 Class 455 455/130 455/150.1 455/161.1 455/166.1	: TELECOMMUNICATIONS
2	455/185.1 (1 Class 455 455/130 455 455/150.1 455/179.1 455/185.1	
2	455/194.1 (1 Class 455 455/130 455/150.1 455/194.1	OR, 1 XR) : TELECOMMUNICATIONS RECEIVER OR ANALOG MODULATED SIGNAL FREQUENCY CONVERTER .Signal selection based on frequency (e.g., tuning)With muting (e.g., silent tuning)
2	455/200.1 (0 Class 455 455/130 455/150.1	OR, 2 XR) : TELECOMMUNICATIONS RECEIVER OR ANALOG MODULATED SIGNAL FREQUENCY CONVERTER .Signal selection based on frequency (e.g.,

tuning)

455/200.1 ..With other control (e.g., volume, gain, bandwidth, etc.)

2 455/208 (0 OR, 2 XR)

Class 455: TELECOMMUNICATIONS

455/130 RECEIVER OR ANALOG MODULATED SIGNAL FREQUENCY CONVERTER

455/205 .Frequency or phase modulation

455/208 ..With synchronized or controlled local

oscillator

2 455/214 (0 OR, 2 XR)

Class 455: TELECOMMUNICATIONS

455/130 RECEIVER OR ANALOG MODULATED SIGNAL FREQUENCY CONVERTER

455/205 .Frequency or phase modulation

455/214 ..With particular discriminator or detector

2 455/222 (0 OR, 2 XR)

Class 455: TELECOMMUNICATIONS

455/130 RECEIVER OR ANALOG MODULATED SIGNAL FREQUENCY CONVERTER

455/218 .Squelch

455/222 ..Noise controlled

2 455/223 (0 OR, 2 XR)

Class 455: TELECOMMUNICATIONS

455/130 RECEIVER OR ANALOG MODULATED SIGNAL FREQUENCY CONVERTER

455/218 .Squelch

455/222 ..Noise controlled

455/223 ...Short duration (noise blankers)

2 455/276.1 (0 OR, 2 XR)

Class 455: TELECOMMUNICATIONS

455/130 RECEIVER OR ANALOG MODULATED SIGNAL FREQUENCY CONVERTER

155 / 0.60 Filth ... /

455/269 .With wave collector (e.g., antenna)

455/272 ..Plural separate collectors

455/276.1 ...With phase shifting, correcting, or

regulating in the output path of one or mor

e collectors

2 455/296 (0 OR, 2 XR)

Class 455: TELECOMMUNICATIONS

455/130 RECEIVER OR ANALOG MODULATED SIGNAL FREQUENCY CONVERTER

	455/296	.Noise or interference elimination
2	455/3.01	OR, 1 XR) : TELECOMMUNICATIONS WIRELESS DISTRIBUTION SYSTEM .Receiver for satellite broadcast
2		: TELECOMMUNICATIONS RECEIVER OR ANALOG MODULATED SIGNAL FREQUENCY CONVERTER
2		OR, 2 XR) : TELECOMMUNICATIONS RECEIVER OR ANALOG MODULATED SIGNAL FREQUENCY CONVERTER .Cabinet, housing, or chassis structureSectional or interconnectable (e.g., modules
2		OR, 1 XR) : TELECOMMUNICATIONS TRANSMITTER AND RECEIVER AT SEPARATE STATIONS

2 455/411 (1	OR,	1	XR)	
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)

Class 455: TELECOMMUNICATIONS 455/403 RADIOTELEPHONE SYSTEM 455/410

.Security or fraud prevention

455/411 ..Privacy, lock-out, or authentication

2 455/458 (0 OR, 2 XR)

455 : TELECOMMUNICATIONS Class 455/403 RADIOTELEPHONE SYSTEM

455/422.1 .Zoned or cellular telephone system

455/458 .. Specific paging technique

455/550.1 (0 OR, 2 XR)

Class 455 : TELECOMMUNICATIONS

455/73 TRANSMITTER AND RECEIVER AT SAME STATION (E.G.

TRANSCEIVER)

455/550.1 .Radiotelephone equipment detail

2 455/557 (0 OR, 2 XR)

Class 455: TELECOMMUNICATIONS

455/73 TRANSMITTER AND RECEIVER AT SAME STATION (E.G.

TRANSCEIVER)

455/550.1 .Radiotelephone equipment detail

455/557 ..Interface attached device (e.g., interface

with modem, facsimile, computer, etc.)

2 455/560 (0 OR, 2 XR)

Class 455: TELECOMMUNICATIONS

455/73 TRANSMITTER AND RECEIVER AT SAME STATION (E.G.

TRANSCEIVER)

455/550.1 .Radiotelephone equipment detail

455/560 ... Switching unit detail (e.g., mobile telephon

e switching office (MTSO), base station controller (BSC),

etc.)

2 455/65 (1 OR, 1 XR)

Class 455: TELECOMMUNICATIONS

455/39 TRANSMITTER AND RECEIVER AT SEPARATE STATIONS

455/63.1 .Distortion, noise, or other interference prevention, reduction, or compensation

455/65 ..Anti-multipath

2 455/66.1 (2 OR, 0 XR)

Class 455: TELECOMMUNICATIONS

455/39 TRANSMITTER AND RECEIVER AT SEPARATE STATIONS

455/66.1 .Having diverse art device

2 455/67.14 (1 OR, 1 XR)

Class 455: TELECOMMUNICATIONS

455/39 TRANSMITTER AND RECEIVER AT SEPARATE STATIONS

455/67.11 .Having measuring, testing, or monitoring of

system or part

455/67.14 ... Using a test signal

2 455/67.7 (1 OR, 1 XR)

Class 455: TELECOMMUNICATIONS

455/39 TRANSMITTER AND RECEIVER AT SEPARATE STATIONS

455/67.11 .Having measuring, testing, or monitoring of system or part

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..With indication (e.g., visual or voice
                         signalling, etc.)
   455/75
                 (1 OR, 1 XR)
                455 : TELECOMMUNICATIONS
        Class
                      TRANSMITTER AND RECEIVER AT SAME STATION (E.G.
        455/73
                          TRANSCEIVER)
        455/75
                      .With frequency stabilization (e.g., automatic
                         frequency control)
  600/513
2
                 (2 OR, 0 XR)
                600 : SURGERY
        Class
                      DIAGNOSTIC TESTING
        600/300
        600/481
                      .Cardiovascular
        600/508
                      ..Heart
                      ...Detecting heartbeat electric signal
        600/509
        600/513
                      ....Detecting heartbeat electric signal and
                         diverse cardiovascular characteristic
   600/523
                 (0 OR, 2 XR)
                600 : SURGERY
        Class
        600/300
                      DIAGNOSTIC TESTING
        600/481
                      .Cardiovascular
        600/508
                      ..Heart
        600/509
                      ... Detecting heartbeat electric signal
        600/523
                      ....Signal display or recording
  607/60
                 (0 OR, 2 XR)
        Class
                607 : SURGERY: LIGHT, THERMAL, AND ELECTRICAL
                        APPLICATION
        607/1
                      LIGHT, THERMAL, AND ELECTRICAL APPLICATION
        607/2
                      .Electrical therapeutic systems
        607/60
                      .. Telemetry or communications circuits
  701/202
                 (0 \text{ OR}, 2 \text{ XR})
        Class
                701: DATA PROCESSING: VEHICLES, NAVIGATION, AND
                        RELATIVE LOCATION
        701/200
                      NAVIGATION
        701/201
                      .Determination of travel data based on the
                          start point and destination point
        701/202
                      .. Route pre-planning
  701/206
                 (0 \text{ OR}, 2 \text{ XR})
        Class
                701 : DATA PROCESSING: VEHICLES, NAVIGATION, AND
                        RELATIVE LOCATION
        701/200
                      NAVIGATION
        701/206
                      .Employing way point navigation
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2	701/209 Class 701/200 701/207 701/208 701/209		OR, 1 XR) : DATA PROCESSING: VEHICLES, NAVIGATION, AND RELATIVE LOCATION NAVIGATION .Employing position determining equipmentFor use in a map data base systemIncluding route searching or determining device
2	701/211 Class 701/200 701/207 701/208 701/211	701	OR, 2 XR) : DATA PROCESSING: VEHICLES, NAVIGATION, AND RELATIVE LOCATION NAVIGATION .Employing position determining equipmentFor use in a map data base systemHaving audio or visual route guidance
2	701/301 Class 701/300 701/301	701	OR, 0 XR) : DATA PROCESSING: VEHICLES, NAVIGATION, AND RELATIVE LOCATION RELATIVE LOCATION .Collision avoidance
2	705/10 Class		OR, 2 XR) : DATA PROCESSING: FINANCIAL, BUSINESS PRACTICE, MANAGEMENT, OR COST/PRICE DETERMIN
ATIO	N 705/1 705/7 705/10		AUTOMATED ELECTRICAL FINANCIAL OR BUSINESS PRACTICE OR MANAGEMENT ARRANGEMENT Operations research Market analysis, demand forecasting or surveying
2	705/14 Class	(0 705	OR, 2 XR) : DATA PROCESSING: FINANCIAL, BUSINESS PRACTICE, MANAGEMENT, OR COST/PRICE DETERMIN
ATIO	705/1 705/14		AUTOMATED ELECTRICAL FINANCIAL OR BUSINESS PRACTICE OR MANAGEMENT ARRANGEMENT. Distribution or redemption of coupon, or incentive or promotion program
2	708/410 Class 708/100 708/200		OR, 2 XR) : ELECTRICAL COMPUTERS: ARITHMETIC PROCESSING AND CALCULATING ELECTRICAL DIGITAL CALCULATING COMPUTER .Particular function performed

	708/400 708/410		Walsh
			OR, 1 XR) : ELECTRICAL COMPUTERS AND DIGITAL PROCESSING SYSTEMS: MULTIPLE COMPUTER OR PROCESS COO
RDIN	ATING 709/200 709/217 709/219		
2			OR, 1 XR) : ELECTRICAL COMPUTERS AND DIGITAL DATA PROCESSING SYSTEMS: INPUT/OUTPUT
	710/1 710/33		INPUT/OUTPUT DATA PROCESSING .Data transfer specifying
2		725	OR, 2 XR) : INTERACTIVE VIDEO DISTRIBUTION SYSTEMS USER-REQUESTED VIDEO PROGRAM SYSTEM .Pay-per-view
2	/	725	OR, 2 XR) : INTERACTIVE VIDEO DISTRIBUTION SYSTEMS VIDEO DISTRIBUTION SYSTEM WITH UPSTREAM COMMUNICATION .Alarm system using television network
2	725/142 Class 725/135 725/139 725/142	725	OR, 2 XR) : INTERACTIVE VIDEO DISTRIBUTION SYSTEMS VIDEO DISTRIBUTION SYSTEM WITH LOCAL INTERACTION
2	725/151 Class 725/143 725/151	725	OR, 2 XR) : INTERACTIVE VIDEO DISTRIBUTION SYSTEMS VIDEO DISTRIBUTION SYSTEM COMPONENTS .Receiver (e.g., set-top box)
2	725/31 Class 725/28 725/31		OR, 2 XR) : INTERACTIVE VIDEO DISTRIBUTION SYSTEMS .Of specific program (e.g., based on program rating) With appropriate or garageling of wideo signal
	123/31		.With encryption or scrambling of video signal

2 725/43 (0 OR, 2 XR)

		—
	Class	725 : INTERACTIVE VIDEO DISTRIBUTION SYSTEMS
	725/37	OPERATOR INTERFACE
	725/38	.To facilitate tuning or selection of video
		signal
	725/39	Electronic program guide
	725/40	For displaying additional information
	725/43	With separate window, panel, or screen
2	725/53	(0 OR, 2 XR)
	Class	725 : INTERACTIVE VIDEO DISTRIBUTION SYSTEMS
	725/37	OPERATOR INTERFACE
	725/38	.To facilitate tuning or selection of video
		signal
	725/39	Electronic program guide
	725/53	Searching (e.g., by title or actor's name)

09980220 CLS

Most Frequently Occurring Classifications of Patents Returned From A Search of 09980220 on October 15, 2004

Original Classifications 11 455/186.1 7 455/45 455/3.06 375/222 4 455/161.3 340/7.25 3 340/825.02 3 348/734 3 370/312 3 375/142 3 375/285 3 386/83 3. 398/76 3 455/161.2 3 725/41 2 324/334 2 329/300 2 340/539.16 2 340/7.21 2 340/7.27 2 340/7.41 2 340/825.25 2 340/870.11 340/870.17 2 342/128 2 342/25R 2 342/42 2 370/204 2 370/343 2 372/96 2 375/130 2 375/219

2 455/158.5 2 455/205 2 455/226.1

375/259

375/324

380/223

380/34

386/105

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2

2

2

2

2 455/2602 455/66.1

2 600/509

- 2 600/513
- 2 701/301

Cross-Reference Classifications

- 23 455/186.1
- 20 455/45
- 455/161.2 11
- 7 340/825.72
- 7 455/161.3
- 6 375/344
- 340/825.49
- 5 370/343
- 5 375/216
- 5 375/316
- 5 455/154.1
- 5 455/158.4
- 5 455/226.1
- 5 455/67.11
- 5 455/70
- 5 455/73
- 340/7.31
- 348/461 4
- 4 348/473
- 4 348/607
- 4 348/725
- 4 375/150
- 4 375/219
- 4 375/296
- 4 455/12.1
- 4 455/134
- 4 455/228 455/345
- 4 455/503
- 455/67.13
- 3 128/903
- 3 340/531
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09980220_CLS

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09980220_CLS

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PLUS Search Results for S/N 09980220, Searched October 15, 2004

The Patent Linguistics Utility System (PLUS) is a USPTO automated sear ch

system for U.S. Patents from 1971 to the present. PLUS is a query-by-example search system which produces a list of patents that a re

most closely related linguistically to the application searched. This search was prepared by the staff of the Scientific and Technical Information Center, SIRA.

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